Transportation & Distribution Information Systems (TDIS)

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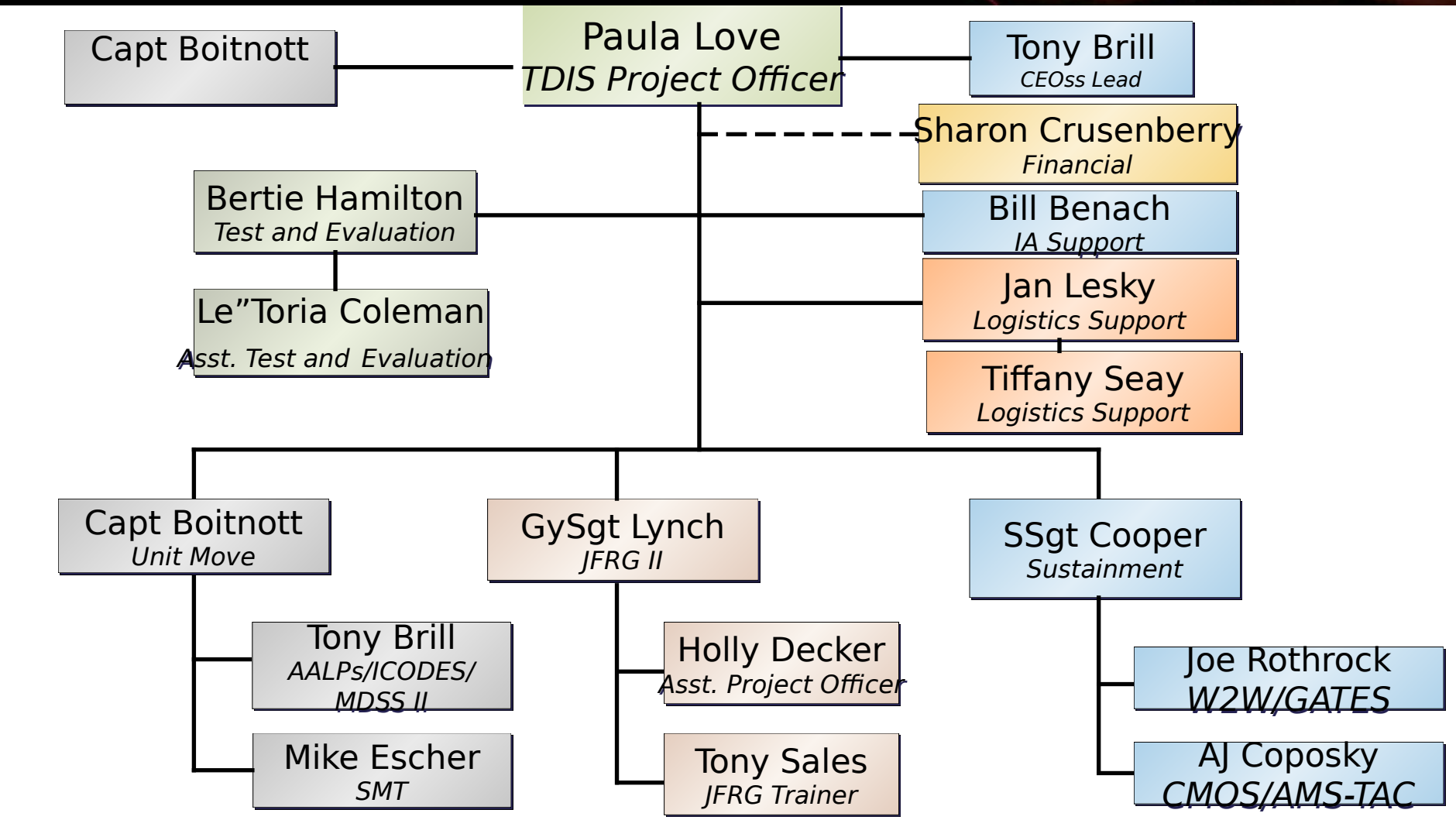
Mission

To develop, provide, and maintain integrated logistics systems that improve transportation, FDP&E, AIT, and distribution services to the Warfighter in a deployed and garrison environment, enhancing their war fighting capability.

MARINE CORPS SYSTEMS COMMAND

UNITED STATES MARINE CORPS



TDIS Applications

- **AMS-TAC – Automated Manifest System - Tactical**
- **CMOS – Cargo Movement Operations System**
- **W2W – Warehouse to War fighter**
- **Future Plans include integration of life cycle management responsibilities for:**
  - **TOPS, AGTR, GATES, Power track, GFM**
    - **Manpower and Funding Resources**

AMS-TAC

AMS-TAC Current

- Fielded version 3.0.7
- Testing complete for version 3.1
  - SSAA/IA documentation in process
  - NMCI Certification pending resolution of challenges
    - Peer-to Peer or mapping is in violation of NMCI business rules
    - Using Unit budget for appropriate NMCI Seat assignment
    - Establishing seat assignments

AMS-TAC

AMS-TAC Future

- Alternatives
  - Web-enable in concert with client version (Navy/USMC venture)
  - Integration with W2W
  - Integration into CMOS
    - Capabilities Based Assessment Team (CBAT) vision
    - More Users MLG
    - Functionality tradeoffs btw Services

CMOS

- 7.0 in IA certification process
- 7.1 certification will start upon completion of 7.0 upgrade
- Everyone should be writing RFID Tags out of CMOS for Iraq Shipments (IAW Policy)
- Working keyboard readers vice scanners
- Working 2d Barcode for 1348's
- Training 5-9 Jun, ANG, Harrisburg, PA.
  - Aug class unfunded
  - AIT Lab setup possible for mid term solution
- SPI Refresh, 55 Desk 18 Laptops
- Web-enable, USTC CBAT initiative
- D-CMOS
  - Any issues ?

Bridge Technology

LTMITV-W2W

Last Tactical Mile In-Transit Visibility

Warehouse to

W2W Background

- I MEF creation
  - Late Summer 2003 - SYTEX (Prime Vendor/Systems integrator)
  - Deployed to Iraq
- II MEF transitioned deployment and refined W2W material solution and business process
- MARCORSYSCOM assumed program management responsibilities in Aug 05

W2W

- Last-Mile’ visibility of supplies forward
- Non-nodal location updates.
  - Not dependent on nodal interrogators
- Electronic capture of consignee data at delivery point
- Automated generation of AS1/AS2 transactions

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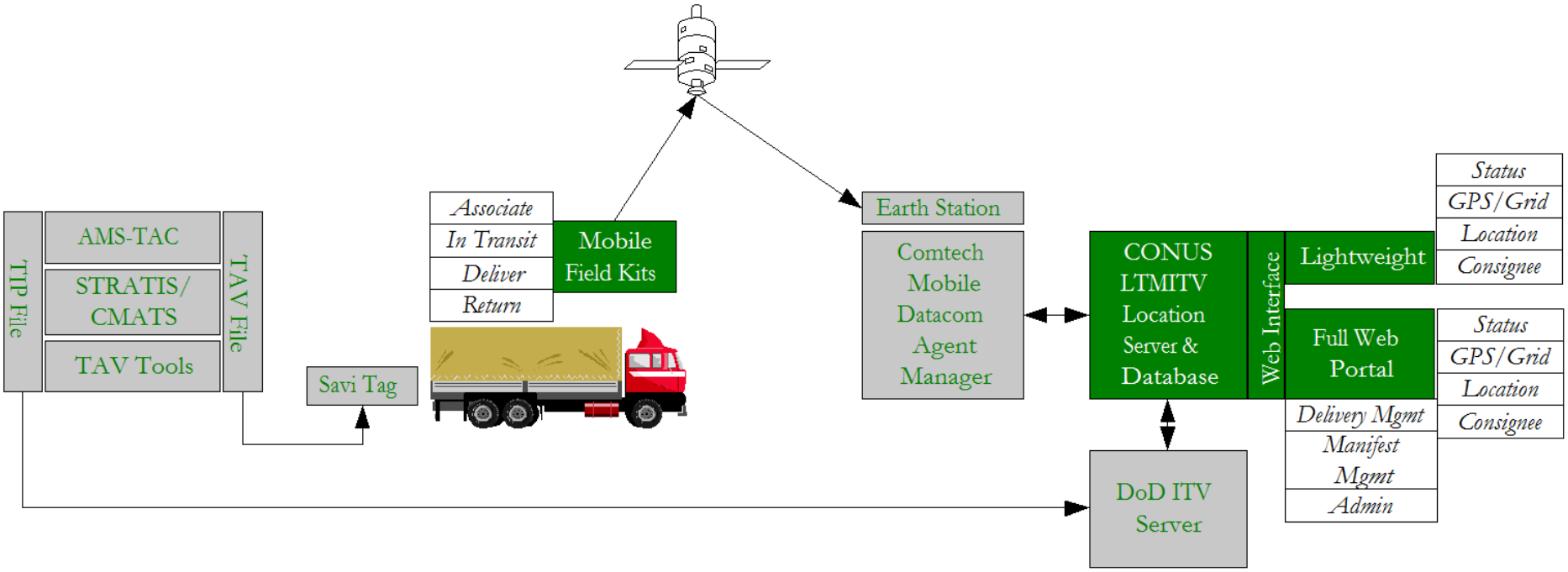
W2W



W2W Principle Items

- Server
- Mobile Kit
  - Computer (Laptop/tablet)
  - Transceiver
  - Cable Assembly
  - Power Supply

No difference btw Base Unit Kit or Mobile Kit just how it is emplo

W2W Functional Overview

- Server
  - Receives and parses TIP files or content level detail from ITV
  - From Base Unit Kit or Mobile Kit
    - Receives location (GPS) updates
    - Receives camp drop, RUC pickup and RUC delivery data
  - Provides rich query and lightweight query alternatives via web interface
  - Sends AS1 and AS2 80 card column courier file updates to USMC server for consumption based on in-garrison and theatre business rules

W2W Functional Overview

- Base Unit Kit or Mobile Unit Kit
  - Computer with Visibility Tracking Program (VTP)
  - At delivery preparation – input of PDC, AAC and Tag ID
  - At Camp Drop, RUC Pickups and End RUC Deliveries
    - Mobile Unit Kit – GPS updates and input of Tag ID and Consignee data
    - Base Unit Kit – input of Tag ID and Consignee data

- Visibility Tracking Program
- Software application that runs on Tablet PC, which is part of a Field Kit
  - A few touch screen, most pen-based
  - Pen-based provide brighter screens
  - Includes graphic keyboard pop-up to allow entry of name/textual data via keyboard
  - Pen-based also provides additional means of handwriting recognition for input

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W2W

W2W

- Correlates delivery manifest data and Tag IDs with a field kit that is placed within a delivery/convoy vehicle
- Provides a means to query the location and current status of materiel pushed from SMU/TMO forward via a web enabled interface
- Can be configured 2 ways:
  - Mobile unit on each supply convoy from warehouse
    - Direct RUC delivery – AS2 (D6T)
    - Intermediate camp drop – AS1
  - Fixed system at each camp
    - Capture subsequent RUC pickup from camp – AS2 (D6T)

W2W

- Relies on satellite transceiver and GPS to communicate data to Location Server
  - Designed to use minimal bandwidth
  - Same transceivers as MTS and BFT
  - Provides robust seamless satellite data communications to ensure data that is sent up is not ‘lost in the ether’
  - All communications between Field Kit and Satellite are encrypted
- Does not depend on a localized server
- Laptop does not use mapping software– it is purely an input/filter for data up to the Location Server

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W2W

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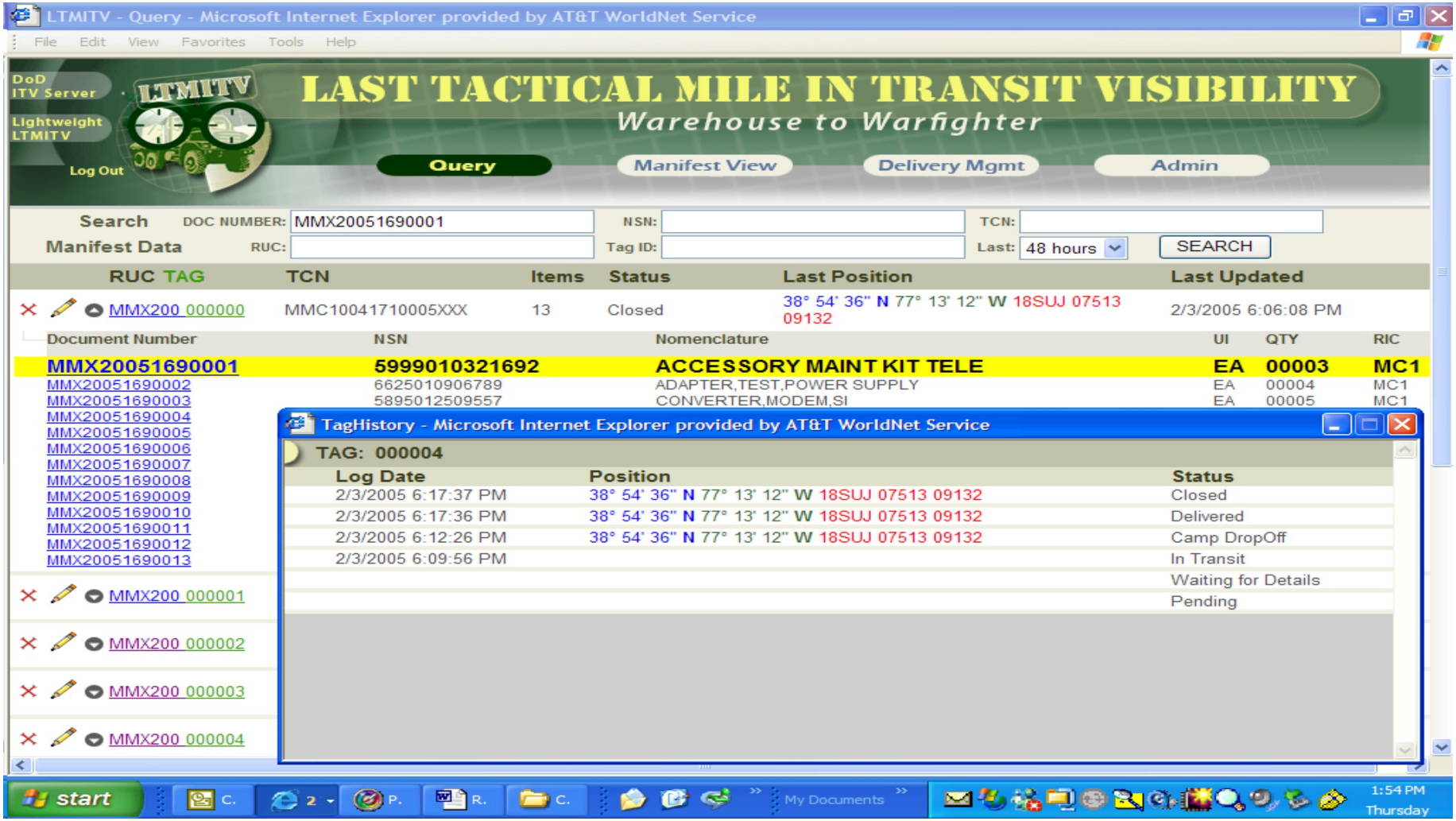
W2W



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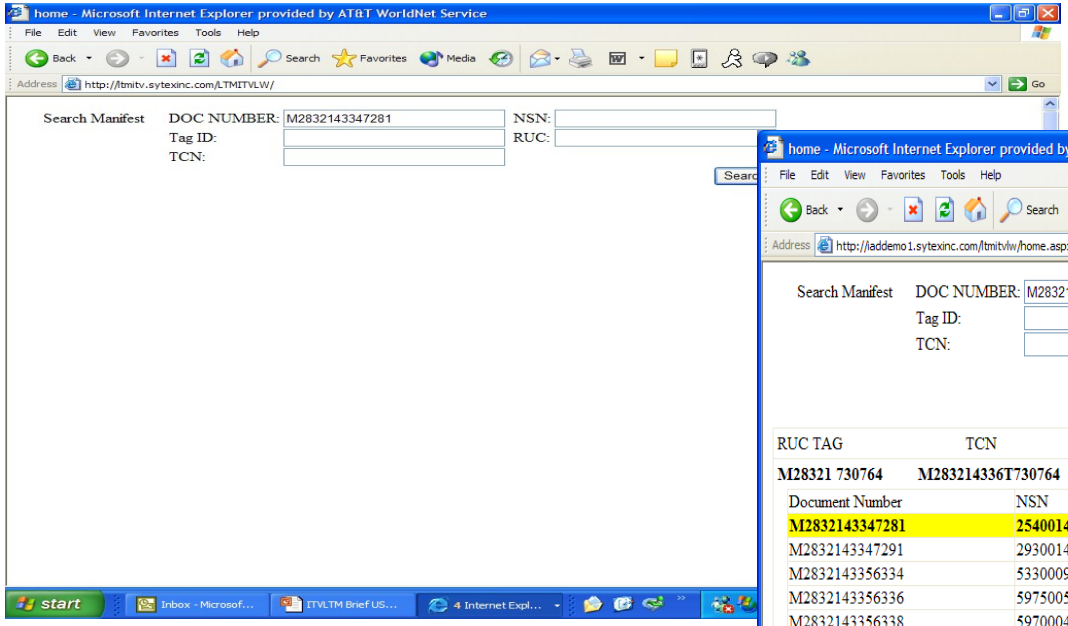
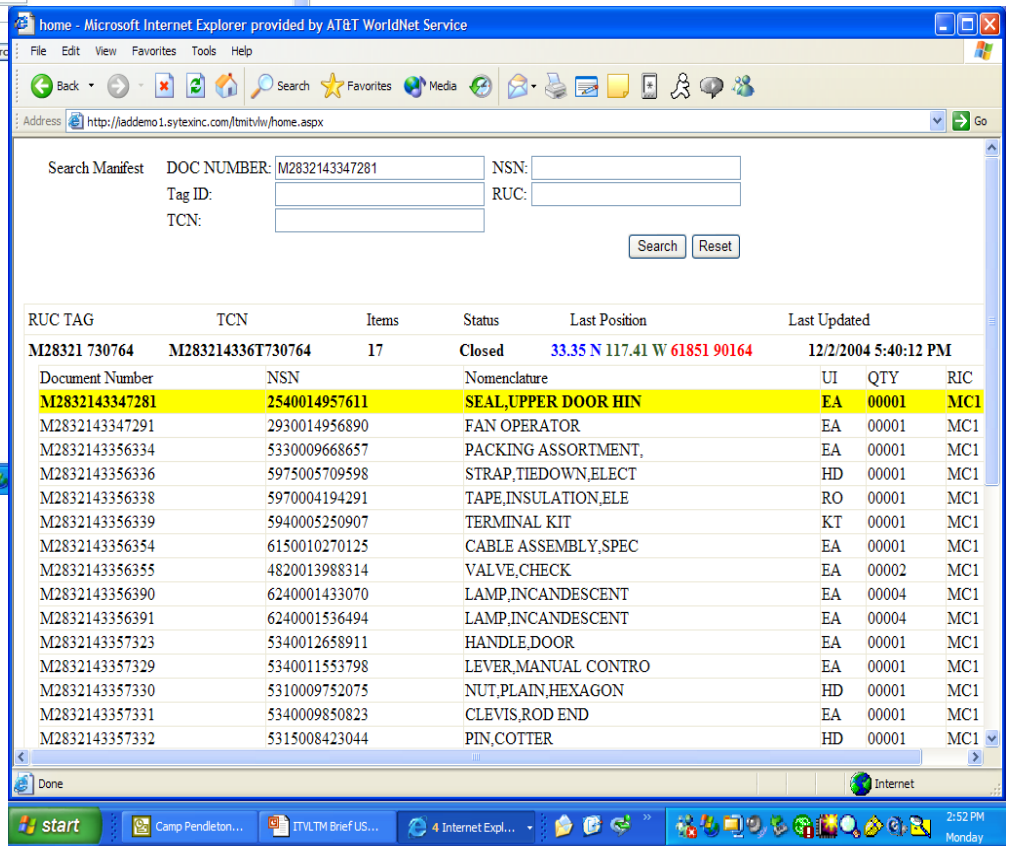
W2W





Lightweight Query

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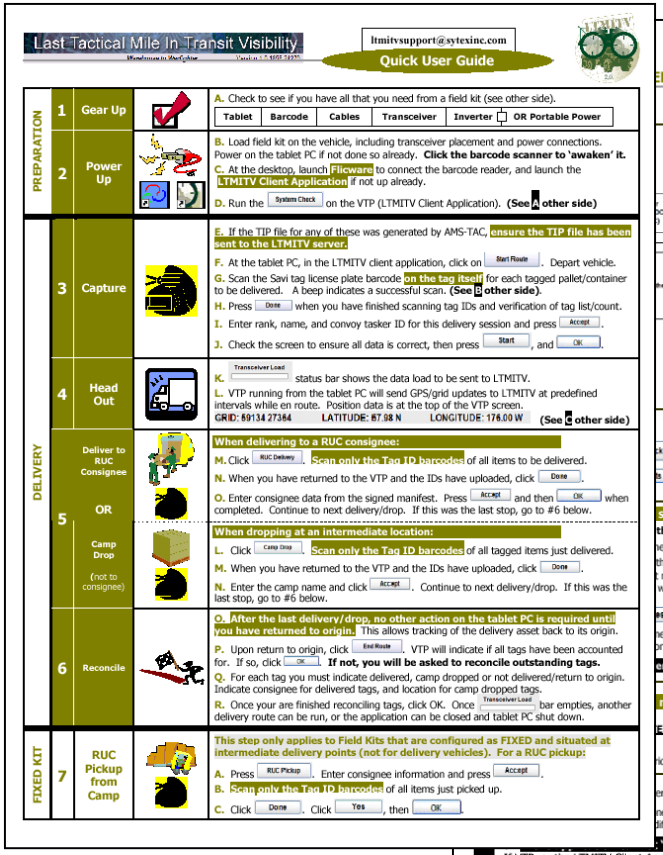
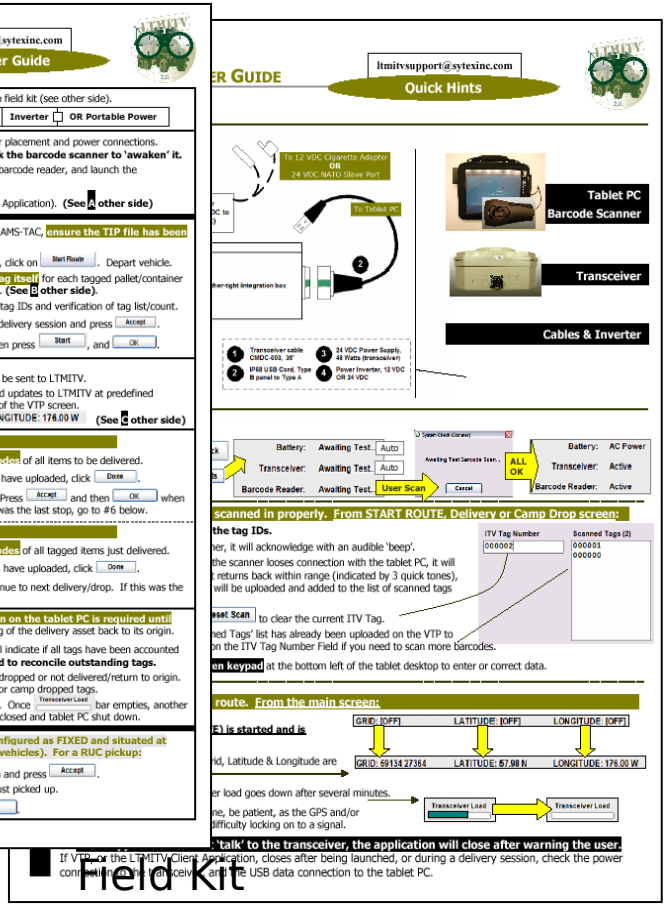
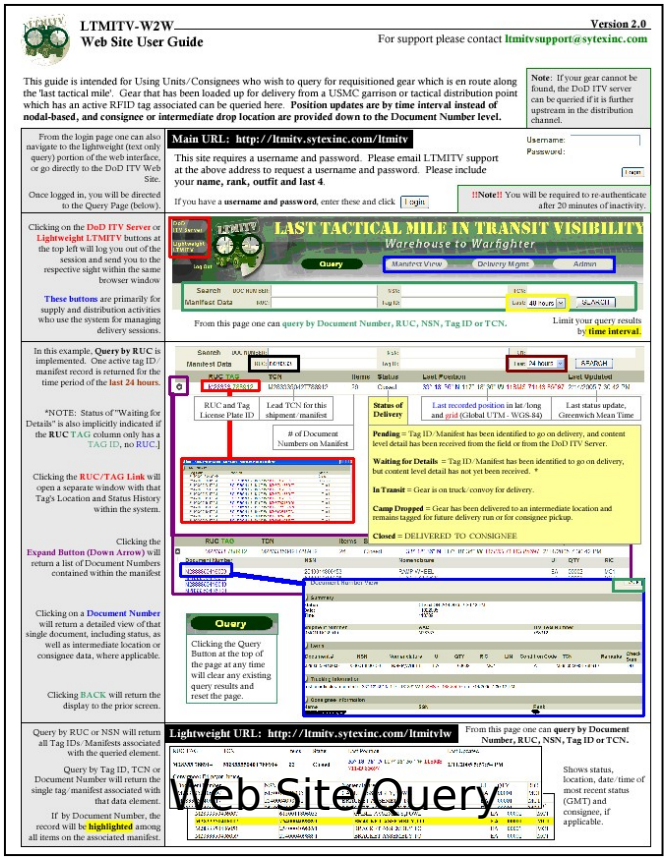
Quick User Guides



Field Kit





Web Site/Query

Next Steps

- Continue to assess operational use
- Continue in-theatre fielding and assessment
- Field Kits to all 3 MEF's for Training Base
- Determine additional requirements
- Conduct Requirements Board for seamless distribution process (AMS/W2W ?)
- Future minor releases
- Passive RFID options
- Smaller footprint (Handheld)
- Converge with other SatCom providers
- MCEITS, IA Process

What it all Means

- Visibility from Warehouse to Warfighter
- Robust COTS platform
- Simplified approach
  - Uses pre-positioned data
  - Economic use of bandwidth
- Not intended as another stovepipe
- Reusable platform to solve real problems right now…
- …while recognizing that change is inevitable with:
  - Increased use and feedback
  - Technology trends and adoption
  - Standards, policy and directive evolution

Questi

Transportation and Distribution Information Systems (TDIS) Program Office

Thank You!